

AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of claims will replace all prior versions and listings of the claims in the present application:

LISTING OF THE CLAIMS:

1-10. (Canceled).

11. (Currently Amended) A device for classifying at least one object with the aid of an environmental sensor system of a vehicle, comprising:

a classifying arrangement to classify ~~wherein the device is configured such that the device classifies~~ the at least one object based on its object velocity and object acceleration[[],]; and

a determining arrangement to determine ~~the device determining~~ the object velocity and the object acceleration from at least one signal of the environmental sensor system[[],];

wherein the device is adapted to be coupled to a restraint system and is capable of controlling the restraint system as a function of the classification of the at least one object and a relative velocity of the at least one object relative to the vehicle, and

wherein the device classifies the at least one object into one of: a first object class or a second object class, the first object class being a vehicle object class and the second object class being a pedestrian object class.

12. (Previously Presented) The device as recited in Claim 11, wherein the object acceleration is determined based on at least one reference acceleration.

13. (Previously Presented) The device as recited in Claim 11, wherein the object acceleration is determined based on a time characteristic of a reference velocity and of the object velocity.

14-16. (Canceled).

17. (Previously Presented) The device as recited in Claim 11, wherein the object velocity is determined with the aid of a relative velocity.

18-20. (Canceled).

21. (Previously Presented). The device as recited in Claim 11, wherein the object velocity is determined on the basis of a time characteristic of location information.

22-24. (Canceled).

25. (Previously Presented). The device as recited in Claim 11, wherein the environmental sensor system has at least one photonic mixer device.

26. (Canceled).

27. (Previously Presented) The device as recited in Claim 11, wherein the environmental sensor system has a LIDAR system.

28. (Canceled).

29. (Previously Presented) The device as recited in Claim 11, wherein the device is configured for outputting information to the driver, the output taking place as a function of the classification.

30. (Previously Presented) The device as recited in Claim 29, wherein the information is outputted haptically.

31. (Canceled).

32. (Previously Presented) The device of claim 11, wherein the controlling of the restraint system is also as a function of at least one additional crash parameter.

33. (Currently Amended) A method for classifying at least one object with the aid of an environmental sensor system of a vehicle, the method comprising:

classifying the at least one object based on an object velocity and an object acceleration of the at least one object, wherein the classifying classifies the at least one object into one of: a first object class or a second object class, the first object class being a vehicle object class and the second object class being a pedestrian object class;

determining the object velocity and the object acceleration from at least one signal of the environmental sensor system; and

controlling a restraint system as a function of the classification of the at least one object and a relative velocity of the at least one object relative to the vehicle;

wherein the device classifies the at least one object into one of: the first object class, the second object class or a third object class, the third object class being a securely-anchored object class.

34. (Canceled).

35. (Previously Presented) The device of claim 11, wherein the device is configured to, after the classification of the at least one object has been performed, test the accuracy of the classification using a position of the at least one object.

36. (Previously Presented) The device of claim 35, wherein the position of the at least one object can have a first value and a second value, the first value indicating that the at least one object is on the roadway, the second value indicating that the at least one object is next to the roadway.

37. (Previously Presented) The device of claim 11, wherein the device is configured to control the restraint system in a different manner for different object classifications.

38. (Previously Presented) The device of claim 11, wherein the device is configured to not classify objects having a substantially zero object velocity.

39. (Previously Presented) The device of claim 13, wherein the device is configured to determine the reference velocity based on at least one of: a wheel velocity, an anti-lock braking (ABS) system, or a tachometer.

40. (Previously Presented) The device of claim 17, wherein the device is configured to determine the object velocity also based on a reference velocity, and the device is configured to receive the reference velocity from a controller area network (CAN).

41. (Previously Presented) The device of claim 11, wherein the object velocity is determined based on a relative velocity of the at least one object relative to the vehicle, a reference velocity of the vehicle, and a braking status of the vehicle.

42. (New) The device of claim 11, wherein the object acceleration is determined based on a time characteristic of a reference velocity and of the object velocity, wherein the object velocity is determined based on at least one of a relative velocity and a time characteristic of location information, wherein information is output to the driver as a function of the classification, wherein the object velocity is determined based on the relative velocity of the at least one object relative to the vehicle, a reference velocity of the vehicle, and a braking status of the vehicle, and wherein the reference velocity is determined based on at least one of a wheel velocity, an anti-lock braking (ABS) system, or a tachometer.

43. (New) The device of claim 42, wherein after the classification of the at least one object has been performed, the accuracy of the classification is tested using a position of the at least one object, wherein the position of the at least one object can have a first value and a second value, the first value indicating that the at least one object is on the roadway, the second value indicating that the at least one object is next to the roadway, wherein the restraint system is controlled differently for different object classifications, and wherein objects having a substantially zero object velocity are not classified.

44. (New) The device of claim 43, wherein the environmental sensor system has a LIDAR system, wherein the information is outputted haptically, and wherein the controlling of the restraint system is also as a function of at least one additional crash parameter.

45. (New) The device of claim 11, wherein objects having a velocity of zero are classified so as to be excluded, and wherein a plausibility of the classification of the excluded objects is confirmed based on a static position of the excluded objects.

46. (New) The device of claim 11, wherein moving and pedestrians are classified based on their movement patterns, including their specific velocity and acceleration characteristics, wherein objects having a velocity of zero are classified so as to be excluded, and wherein a plausibility of the classification of the excluded objects is confirmed based on a static position of the excluded objects.

47. (New) The method of claim 33, wherein the object acceleration is determined based on a time characteristic of a reference velocity and of the object velocity, wherein the object velocity is determined based on at least one of a relative velocity and a time characteristic of location information, wherein information is output to the driver as a function of the classification, wherein the object velocity is determined based on the relative velocity of the at least one object relative to the vehicle, a reference velocity of the vehicle, and a braking status of the vehicle, and wherein the reference velocity is determined based on at least one of a wheel velocity, an anti-lock braking (ABS) system, or a tachometer.

48. (New) The method of claim 47, further comprising:
testing, after the classification of the at least one object has been performed, the accuracy of the classification using a position of the at least one object;
wherein the position of the at least one object can have a first value and a second value, the first value indicating that the at least one object is on the roadway, the second value indicating that the at least one object is next to the roadway, wherein the device is configured to control the restraint system in a different manner for different object classifications, wherein objects having a substantially zero object velocity are not classified.

49. (New) The method of claim 48, wherein the environmental sensor system has a LIDAR system, wherein the information is outputted haptically, and wherein the controlling of the restraint system is also as a function of at least one additional crash parameter.

50. (New) The method of claim 33, wherein objects having a velocity of zero are classified so as to be excluded, and wherein a plausibility of the classification of the excluded objects is confirmed based on a static position of the excluded objects.

51. (New) The device of claim 33, wherein moving and pedestrians are classified based on their movement patterns, including their specific velocity and acceleration characteristics, wherein objects having a velocity of zero are classified so as to be excluded, and wherein a plausibility of the classification of the excluded objects is confirmed based on a static position of the excluded objects.